

Assessment #5

Submission deadline: 22nd May 2022 11:59pm AEST via Moodle

Instruction

Below are the coding tasks that you need to complete individually for assessment 5 which is a continuation from assessment 4. You should continue to use the same assessment 4 project files. Then work on the tasks in the project folder.

This assessment is worth 12% of the unit total. It contains 30 marks, which has two components.

- Task correctness weighted 20 marks.
 - Task 1 has 10 marks
 - Task 2 has 10 marks
 - Code readability & documentation has 5 marks.
 - Code development has 5 marks.

Academic Integrity

Please be reminded of the academic integrity mentioned in Week 01. You should code alone and ask the unit staff for help. Do not post your code in public forums.

Scenario

EVERY UNIT / SUBJECT OFFERED IN THE **FACULTY OF INFO TECH** HAS THEIR OWN ASSESSMENT. IT CAN BE A MID-TERM TEST, CODING TASKS, ESSAY REPORT OR FINAL EXAM.

YOU ARE REQUIRED TO **EXTEND** the UNIT JAVA CLASS BASED ON THE SPECIFICATIONS AS BELOW TASKS

Task 1 (W9 to W10 - 10 marks)

- Code the class shell and instance variables called **Assessment** . An **Assessment** instance has the following attributes:
 - **assessmentName**: length of 20 characters max
 - **assessmentValue**: The range of value must be 0 to 100% inclusive.
- Code the **getter/accessor** methods for all the instance variables
- Code the **setter/mutator** methods for all the instance variables.

NOTE: The code must protect the integrity of the class's instance variables as required and utilise appropriate naming conventions.

Task 2 (W11 - 10 marks)

- Code a subclass of `Unit` called `UnitAssessment` that has additional instance variables called
 - `assessmentList` which is an `ArrayList` of `Assessment`'s object. This array can support up to `10` types of assessment.
 - `typeOfAssessment` which is an `Assessment`'s object.
- A subclass's 4-parameter **constructor** that includes 3 instances variables from super class (**unitCode**, **creditHour**,**offeredFaculty**) and **type of assessment**.
- A public method called **addAssessment** to add a new assessment to **assessmentList** `ArrayList`. This method should utilise `ArrayList` method and return **true** upon success.

Code Readability (5 marks)



Overall code submission must be well organised and very easy to follow included but not limited to code indentation, code consistency, effective use of whitespace etc.

Code Development & Documentation (5 marks)

Overall code submission demonstrates correct method shell, syntax usage and meaningful naming conventions. Code documentations/inline comments are thorough and in detail.

Submission Instruction

Please submit your IntelliJ project folder as a .zip file and submit to via [Moodle](#) as below. If you are not sure how to zip your project, please refer to the [video](#) here.

 Assessment 5 (Weight: 12%) 

Restricted

 Available from 16 May 2022

Submission link for Assessment 5. Submission can be done from 16th May 2022 onwards until deadline. Please ensure that you submitted your IntelliJ project folder in .zip extension file.

Marking Rubric

 [Assessment#5 Marking Rubric.pdf](#)